

PCT  
09

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/787,633

DATE: 03/28/2001  
 TIME: 17:45:04

Input Set : A:\seqlist.txt  
 Output Set: N:\CRF3\03282001\I787633.raw

**ENTERED**

3 <110> APPLICANT: Wilson, Robert JM  
 4 Mullineaux, Conrad W  
 5 Law, Anna E  
 7 <120> TITLE OF INVENTION: Treatment of Infection  
 9 <130> FILE REFERENCE: 117-347  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/787,633  
 12 <141> CURRENT FILING DATE: 2001-03-21  
 14 <150> PRIOR APPLICATION NUMBER: PCT/GB99/03180  
 15 <151> PRIOR FILING DATE: 1999-09-22  
 17 <150> PRIOR APPLICATION NUMBER: GB 9820658.4  
 18 <151> PRIOR FILING DATE: 1998-09-22  
 20 <160> NUMBER OF SEQ ID NOS: 7  
 22 <170> SOFTWARE: PatentIn Ver. 2.1  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 1444  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Plasmodium falciparum  
 29 <220> FEATURE:  
 30 <221> NAME/KEY: CDS  
 31 <222> LOCATION: (26)..(1435)  
 33 <220> FEATURE:  
 34 <221> NAME/KEY: misc\_feature  
 35 <222> LOCATION: (1276)  
 36 <223> OTHER INFORMATION: h represents A, T or C  
 38 <400> SEQUENCE: 1  
 39 tttattatatt ttatatataa ttatt 'atg ata aaa tta aaa aat ttt tta aat 52  
 40 Met Ile Lys Leu Lys Asn Phe Leu Asn  
 41 1 5  
 43 att tat aat tta aat tat aaa tat caa tat aaa aat aaa ata aat tta 100  
 44 Ile Tyr Asn Leu Asn Tyr Lys Tyr Gln Tyr Lys Asn Lys Ile Asn Leu  
 45 10 15 20 25  
 47 tat tta ata aga caa gga tta aat ata aat tta ata aaa aat tta tct 148  
 48 Tyr Leu Ile Arg Gln Gly Leu Asn Ile Asn Leu Ile Lys Asn Leu Ser  
 49 30 35 40  
 51 agt aat att ttt tta tat atg ttt att tat aat ttt aaa aaa tat tct 196  
 52 Ser Asn Ile Phe Leu Tyr Met Phe Ile Tyr Asn Phe Lys Lys Tyr Ser  
 53 45 50 55  
 55 tta aaa tta tta aat ata ttt aaa tta cct gat tgg aat ttt ttt gat 244  
 56 Leu Lys Leu Leu Asn Ile Phe Lys Leu Pro Asp Trp Asn Phe Phe Asp  
 57 60 65 70  
 59 tgt cca aat ata aat tat gat aat att att tat tat tct tct att tta 292  
 60 Cys Pro Asn Ile Asn Tyr Asp Asn Ile Ile Tyr Tyr Ser Ser Ile Leu  
 61 75 80 85  
 63 aaa gat aat aat tta ata tat tat tta aaa aat aat tta aat att gaa 340  
 64 Lys Asp Asn Asn Leu Ile Tyr Tyr Leu Lys Asn Asn Leu Asn Ile Glu  
 65 90 95 100 105  
 67 ttt tta gat agt ata tta ata aaa aat aat tct ata gat att ata ttt 388

## RAW SEQUENCE LISTING

DATE: 03/28/2001

PATENT APPLICATION: US/09/787,633

TIME: 17:45:04

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\03282001\I787633.raw

OK  
W-->

```

68 Phe Leu Asp Ser Ile Leu Ile Lys Asn Asn Ser Ile Asp Ile Ile Phe
69          110          115          120
71 gat agt atg tct att tta cat act aca caa tat ttt tta aaa aaa tth 436
72 Asp Ser Met Ser Ile Leu His Thr Thr Gln Tyr Phe Leu Lys Lys Xaa
73          125          130          135
75 gga ata att ttt tta cct tta ttt gat att ata ttt aaa tat cct tta 484
76 Gly Ile Ile Phe Leu Pro Leu Phe Asp Ile Ile Phe Lys Tyr Pro Leu
77          140          145          150
79 tta ata aaa aaa tat tta ggt act att att tct tat aaa gat aat ttt 532
80 Leu Ile Lys Lys Tyr Leu Gly Thr Ile Ile Ser Tyr Lys Asp Asn Phe
81          155          160          165
83 ttt gct aat att aat tca ata ata ttt agt gaa gga tct ttt tgt tat 580
84 Phe Ala Asn Ile Asn Ser Ile Ile Phe Ser Glu Gly Ser Phe Cys Tyr
85 170          175          180          185
87 ata cct aaa tat gta aag tgt aat ttt aat tta tca aca tat ttt aaa 628
88 Ile Pro Lys Tyr Val Lys Cys Asn Phe Asn Leu Ser Thr Tyr Phe Lys
89          190          195          200
91 act aat tct tct gat ttt gca caa ttt gaa cgt act tta ata ata gtt 676
92 Thr Asn Ser Ser Asp Phe Ala Gln Phe Glu Arg Thr Leu Ile Ile Val
93          205          210          215
95 ggt aaa tat tct tat gta tca tat tta gaa gga tgt aca gct tca tta 724
96 Gly Lys Tyr Ser Tyr Val Ser Tyr Leu Glu Gly Cys Thr Ala Ser Leu
97          220          225          230
99 tat aaa gaa tca caa tta cat gta gct ata gta gaa ata ata gta aaa 772
100 Tyr Lys Glu Ser Gln Leu His Val Ala Ile Val Glu Ile Ile Val Lys
101          235          240          245
103 gat tat ggt tat ata aaa tat tat aca tta caa aat tgg tat aga gga 820
104 Asp Tyr Gly Tyr Ile Lys Tyr Tyr Thr Leu Gln Asn Trp Tyr Arg Gly
105 250          255          260          265
107 gat tat tta ggt aat ggt ggt tta tat aat ttt aca act aaa cgt ggt 868
108 Asp Tyr Leu Gly Asn Gly Gly Leu Tyr Asn Phe Thr Thr Lys Arg Gly
109          270          275          280
111 ata tgt tta aat tat tca aaa tta gat tgg ata caa gtt gaa gta ggt 916
112 Ile Cys Leu Asn Tyr Ser Lys Leu Asp Trp Ile Gln Val Glu Val Gly
113          285          290          295
115 tcg att ata aca tgg aaa tac cct tct act att tta aaa ggt aaa ttt 964
116 Ser Ile Ile Thr Trp Lys Tyr Pro Ser Thr Ile Leu Lys Gly Lys Phe
117          300          305          310
119 tct att agt aat ttt tat tca ata tct ttt ata tca aat atg caa ata 1012
120 Ser Ile Ser Asn Phe Tyr Ser Ile Ser Phe Ile Ser Asn Met Gln Ile
121          315          320          325
123 gct gat act ggt agt aaa atg tat cat ata gga tct tat act aaa agt 1060
124 Ala Asp Thr Gly Ser Lys Met Tyr His Ile Gly Ser Tyr Thr Lys Ser
125 330          335          340          345
127 tat ata att tct aaa agt ata tct tta aat aac tca tta aat ata ttt 1108
128 Tyr Ile Ile Ser Lys Ser Ile Ser Leu Asn Asn Ser Leu Asn Ile Phe
129          350          355          360
131 aga ggt tta gta tat att aaa cct ttt tca tat aaa tct tat aat tat 1156
132 Arg Gly Leu Val Tyr Ile Lys Pro Phe Ser Tyr Lys Ser Tyr Asn Tyr

```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/787,633

DATE: 03/28/2001  
 TIME: 17:45:04

Input Set : A:\seqlist.txt  
 Output Set: N:\CRF3\03282001\I787633.raw

```

133          365          370          375
135 act gaa tgt agt tct tta ata ttt ggt aat aat tct tta aca gta act 1204
136 Thr Glu Cys Ser Ser Leu Ile Phe Gly Asn Asn Ser Leu Thr Val Thr
137          380          385          390
139 att cct tat ata aaa aat tat aat aat act agt tat gta aaa caa gaa 1252
140 Ile Pro Tyr Ile Lys Asn Tyr Asn Asn Thr Ser Tyr Val Lys Gln Glu
141          395          400          405
143 gct ttt gtt tct aaa att gaa ath ata tat tta ttt tta tta atg caa 1300
144 Ala Phe Val Ser Lys Ile Glu Ile Ile Tyr Leu Phe Leu Leu Met Gln
145 410          415          420          425
147 cgt ggt tta agt att tca gag tct att tca tta tta att ata ggt ttt 1348
148 Arg Gly Leu Ser Ile Ser Glu Ser Ile Ser Leu Leu Ile Ile Gly Phe
149          430          435          440
151 tgt tct gat att tat aat aaa tta ccg ttt gaa ttt aat tta gag ata 1396
152 Cys Ser Asp Ile Tyr Asn Lys Leu Pro Phe Glu Phe Asn Leu Glu Ile
153          445          450          455
155 cct ata tta ttt tca tta aaa att aaa gat ata ttt aat taattaaat 1444
156 Pro Ile Leu Phe Ser Leu Lys Ile Lys Asp Ile Phe Asn
157          460          465          470
161 <210> SEQ ID NO: 2
162 <211> LENGTH: 1443
163 <212> TYPE: DNA
164 <213> ORGANISM: Synechocystis PCC6803
166 <220> FEATURE:
167 <221> NAME/KEY: CDS
168 <222> LOCATION: (1)..(1443)
170 <400> SEQUENCE: 2
171 atg agt tcc acc act gtt aaa aac ctg gtc aac caa ccc tac aaa tat 48
172 Met Ser Ser Thr Thr Val Lys Asn Leu Val Asn Gln Pro Tyr Lys Tyr
173 1 5 10 15
175 ggc ttt gtc acc aac att gaa gcg gat gct atc ccc cgt ggt ctg agt 96
176 Gly Phe Val Thr Asn Ile Glu Ala Asp Ala Ile Pro Arg Gly Leu Ser
177 20 25 30
179 gaa gac gtg gtg cga ctc att tct gct aag aaa aat gaa ccc gaa ttc 144
180 Glu Asp Val Val Arg Leu Ile Ser Ala Lys Lys Asn Glu Pro Glu Phe
181 35 40 45
183 atg ttg gat ttt cgc ctc cgg gcc tac cgg cat tgg ctg acc atg gcg 192
184 Met Leu Asp Phe Arg Leu Arg Ala Tyr Arg His Trp Leu Thr Met Ala
185 50 55 60
187 gaa ccc act tgg ccg gcg gtg cat tat ccc ccc att gat tac caa gat 240
188 Glu Pro Thr Trp Pro Ala Val His Tyr Pro Pro Ile Asp Tyr Gln Asp
189 65 70 75 80
191 att att tac tac tcc gcc cct aag caa agt aag aaa aaa cta gaa agc 288
192 Ile Ile Tyr Tyr Ser Ala Pro Lys Gln Ser Lys Lys Lys Leu Glu Ser
193 85 90 95
195 tta gat gaa gtg gac cca gct ttg ttg gaa acc ttt gaa aaa tta ggg 336
196 Leu Asp Glu Val Asp Pro Ala Leu Leu Glu Thr Phe Glu Lys Leu Gly
197 100 105 110
199 att ccc cta tcg gag caa aaa cgt tta agt aat gtg gcg gta gat gcc 384

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/787,633

DATE: 03/28/2001

TIME: 17:45:04

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\03282001\I787633.raw

200	Ile	Pro	Leu	Ser	Glu	Gln	Lys	Arg	Leu	Ser	Asn	Val	Ala	Val	Asp	Ala	
201			115					120					125				
203	att	ttt	gac	agt	gtt	tcc	att	ggc	aca	act	ttt	aag	gaa	aag	cta	gcg	432
204	Ile	Phe	Asp	Ser	Val	Ser	Ile	Gly	Thr	Thr	Phe	Lys	Glu	Lys	Leu	Ala	
205		130						135					140				
207	gaa	gac	ggg	gta	att	ttc	tgt	tct	att	tct	gaa	gca	ttg	cag	gaa	cat	480
208	Glu	Asp	Gly	Val	Ile	Phe	Cys	Ser	Ile	Ser	Glu	Ala	Leu	Gln	Glu	His	
209	145					150					155					160	
211	ccc	gac	ctg	gtg	caa	aaa	tat	ttg	ggc	agt	gtg	gtg	ccc	acc	gcc	gac	528
212	Pro	Asp	Leu	Val	Gln	Lys	Tyr	Leu	Gly	Ser	Val	Val	Pro	Thr	Ala	Asp	
213					165					170					175		
215	aac	ttc	ttt	gcc	gcc	tta	aac	tct	gct	gta	ttt	agt	gac	ggt	tcc	ttt	576
216	Asn	Phe	Phe	Ala	Ala	Leu	Asn	Ser	Ala	Val	Phe	Ser	Asp	Gly	Ser	Phe	
217				180					185					190			
219	gtt	ttt	att	ccc	aaa	ggg	gtg	aag	tgt	ccc	atg	gaa	ttg	tcc	acc	tat	624
220	Val	Phe	Ile	Pro	Lys	Gly	Val	Lys	Cys	Pro	Met	Glu	Leu	Ser	Thr	Tyr	
221		195						200					205				
223	ttc	cgc	att	aat	aat	ggg	gat	acg	ggg	cag	ttt	gag	cgg	aca	tta	att	672
224	Phe	Arg	Ile	Asn	Asn	Gly	Asp	Thr	Gly	Gln	Phe	Glu	Arg	Thr	Leu	Ile	
225		210				215						220					
227	att	gcc	gaa	gaa	ggg	gct	tcc	gtt	agc	tat	ttg	gaa	ggt	tgt	act	gcg	720
228	Ile	Ala	Glu	Glu	Gly	Ala	Ser	Val	Ser	Tyr	Leu	Glu	Gly	Cys	Thr	Ala	
229	225				230					235					240		
231	ccc	atg	tat	gac	acc	aat	caa	ctt	cat	gcg	gcg	gtg	gtg	gaa	ttg	gta	768
232	Pro	Met	Tyr	Asp	Thr	Asn	Gln	Leu	His	Ala	Ala	Val	Val	Glu	Leu	Val	
233				245						250				255			
235	gct	cta	gat	aat	gct	gac	att	aaa	tat	tcc	acc	gta	caa	aac	tgg	tac	816
236	Ala	Leu	Asp	Asn	Ala	Asp	Ile	Lys	Tyr	Ser	Thr	Val	Gln	Asn	Trp	Tyr	
237				260					265					270			
239	gct	ggg	gac	gaa	aat	ggc	aag	ggc	gga	att	tac	aac	ttt	gtg	act	aaa	864
240	Ala	Gly	Asp	Glu	Asn	Gly	Lys	Gly	Gly	Ile	Tyr	Asn	Phe	Val	Thr	Lys	
241		275						280					285				
243	cgg	ggt	cta	tgt	aaa	gga	gtt	aat	tcc	aaa	att	tcc	tgg	acc	caa	gta	912
244	Arg	Gly	Leu	Cys	Lys	Gly	Val	Asn	Ser	Lys	Ile	Ser	Trp	Thr	Gln	Val	
245		290				295						300					
247	gaa	acc	ggt	tcc	gcc	att	acc	tgg	aaa	tac	ccc	agt	tgt	gtg	cta	gtt	960
248	Glu	Thr	Gly	Ser	Ala	Ile	Thr	Trp	Lys	Tyr	Pro	Ser	Cys	Val	Leu	Val	
249	305				310					315					320		
251	ggg	gat	aat	tcc	gtc	ggg	gaa	ttc	tac	tct	att	gct	tta	act	aac	aac	1008
252	Gly	Asp	Asn	Ser	Val	Gly	Glu	Phe	Tyr	Ser	Ile	Ala	Leu	Thr	Asn	Asn	
253				325						330				335			
255	aaa	cag	caa	gct	gat	acg	gga	act	aaa	atg	att	cac	atc	ggt	aaa	aat	1056
256	Lys	Gln	Gln	Ala	Asp	Thr	Gly	Thr	Lys	Met	Ile	His	Ile	Gly	Lys	Asn	
257			340						345					350			
259	acc	cgt	agt	atc	att	att	tcc	aaa	ggc	att	tcc	gct	ggt	aat	tcc	gcc	1104
260	Thr	Arg	Ser	Ile	Ile	Ile	Ser	Lys	Gly	Ile	Ser	Ala	Gly	Asn	Ser	Ala	
261		355						360					365				
263	aac	agt	tac	cgg	ggt	ttg	gtg	aaa	atg	gga	cct	aaa	gcc	cag	ggc	gct	1152
264	Asn	Ser	Tyr	Arg	Gly	Leu	Val	Lys	Met	Gly	Pro	Lys	Ala	Gln	Gly	Ala	

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/787,633

DATE: 03/28/2001  
 TIME: 17:45:04

Input Set : A:\seqlist.txt  
 Output Set: N:\CRF3\03282001\I787633.raw

```

265      370      375      380
267 cgc aat tat tcc cag tgt gat tcc atg ctc att ggc gat cgg gca gcg 1200
268 Arg Asn Tyr Ser Gln Cys Asp Ser Met Leu Ile Gly Asp Arg Ala Ala
269 385      390      395      400
271 gct aat act ttt ccc tat att caa gtg gac aat aat acc gcc aaa gta 1248
272 Ala Asn Thr Phe Pro Tyr Ile Gln Val Asp Asn Asn Thr Ala Lys Val
273      405      410      415
275 gaa cat gaa gct tcc act tcc aaa att ggc gag gat caa ctc ttt tac 1296
276 Glu His Glu Ala Ser Thr Ser Lys Ile Gly Glu Asp Gln Leu Phe Tyr
277      420      425      430
279 ttt gcc caa cgg gga att tct gag gaa gat gcg gtg tcc atg cta gtc 1344
280 Phe Ala Gln Arg Gly Ile Ser Glu Glu Asp Ala Val Ser Met Leu Val
281      435      440      445
283 agc ggt ttc tgt aag gat gtg cta aac gaa tta ccc atg gaa ttt gcg 1392
284 Ser Gly Phe Cys Lys Asp Val Leu Asn Glu Leu Pro Met Glu Phe Ala
285      450      455      460
287 gcg gag gct gat aaa tta ctg agt ctc aaa cta gaa ggt act gtg ggt 1440
288 Ala Glu Ala Asp Lys Leu Leu Ser Leu Lys Leu Glu Gly Thr Val Gly
289 465      470      475      480
291 taa 1443
295 <210> SEQ ID NO: 3
296 <211> LENGTH: 1527
297 <212> TYPE: DNA
298 <213> ORGANISM: Escherichia coli
300 <220> FEATURE:
301 <221> NAME/KEY: CDS
302 <222> LOCATION: (1)..(1527)
304 <400> SEQUENCE: 3
305 atg tgg ctg tgg cga aag ctt tgg ggt ata ggc ggt act atg tct cgt 48
306 Met Trp Leu Trp Arg Lys Leu Trp Gly Ile Gly Gly Thr Met Ser Arg
307 1 5 10 15
309 aat act gaa gca act gac gat gtc aaa acc tgg acc ggc ggc ccg ctg 96
310 Asn Thr Glu Ala Thr Asp Asp Val Lys Thr Trp Thr Gly Gly Pro Leu
311 20 25 30
313 aat tat aaa gaa gga ttc ttc acc cag tta gcc acc gat gag ctg gca 144
314 Asn Tyr Lys Glu Gly Phe Phe Thr Gln Leu Ala Thr Asp Glu Leu Ala
315 35 40 45
317 aag ggg ata aac gaa gag gtg gtg cgc gca att tcg gcg aag cgt aat 192
318 Lys Gly Ile Asn Glu Glu Val Val Arg Ala Ile Ser Ala Lys Arg Asn
319 50 55 60
321 gag ccg gag tgg atg ctg gag ttt cgt cta aac gcc tat cgc gca tgg 240
322 Glu Pro Glu Trp Met Leu Glu Phe Arg Leu Asn Ala Tyr Arg Ala Trp
323 65 70 75 80
325 ctg gag atg gaa gaa ccg cac tgg ttg aaa gcg cac tac gac aag ctg 288
326 Leu Glu Met Glu Glu Pro His Trp Leu Lys Ala His Tyr Asp Lys Leu
327 85 90 95
329 aat tat cag gat tac agc tac tac tca gca cca tcg tgc ggt aat tgt 336
330 Asn Tyr Gln Asp Tyr Ser Tyr Tyr Ser Ala Pro Ser Cys Gly Asn Cys
331 100 105 110

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/787,633

DATE: 03/28/2001

TIME: 17:45:05

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\03282001\I787633.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:72 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1